

ABSTRACT

A package substrate for improving electrical performance includes at least an insulating layer, a wiring layer and a ground/power layer. The wiring layer is formed on a top surface of the insulating layer, and includes a plurality of inner fingers, a plurality of outer fingers and a metal ring. A plurality of inner through holes are formed through the insulating layer to electrically connect corresponding inner fingers to bottom surface of the insulating layer. The ground/power layer has a plurality of openings formed on a bottom surface of the insulating layer. The plurality of inner through holes are crowded in groups to pass through the openings which are electrically isolated from the ground/power layer. Each group of the inner through holes are arranged in grid array or radial arrangement so that a distance between two adjacent openings not less than 0.2mm for improving electrical performance of the ground/power layer.